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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/613,381

07/03/2003

Martin Brox

04020-P0002A

7208

24126

7590

10/05/2004

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EXAMINER

TON, MY TRANG

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,381

Applicant(s)

BROX, MARTIN

Examiner

My-Trang N. Ton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

In response to Applicant's amendment filed on 07/06/04, the rejection made in the last Office action on the Pantelakis et al reference is withdrawn. A new Office action has been made as follows:

Claim Rejections - 35 USC § 112

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is dependent to cancelled claim 6. Did applicant intend for this claim to be also canceled?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyamoto et al (U.S Patent No. 5,192, 878).

Miyamoto et al disclose in Fig. 5 a differential amplifier including:

Regarding claim 1 :

an amplifier device (25, 26, 29, 30, 43, 44),

wherein for generating signals at a second voltage level (Vcc), a first and a second output signal (connected to 25 and N1) of the amplifier device (25, 26, 29, 30,

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43, 44) are used, and wherein the second output signal (connected to 26 and N2) of the amplifier device (25, 26, 29, 30, 43, 44) differs from the first output signal (connected to 25 and N1) of the amplifier device (25, 26, 29, 30, 43, 44),

the voltage converter (Fig. 5) additionally comprising a first and second transmission gate (21-24);

the first transmission gate (21 and 23) being driven by the first output signal (connected to 25 and N1) of the amplifier device (25, 26, 29, 30, 43, 44), and the second transmission gate (22 and 24) being driven by the second output signal (connected to 26 and N2) of the amplifier device (25, 26, 29, 30, 43, 44).

Regarding claim 2: the first and second output signals are mutually complementary signals (A, A*).

The limitation recited in claims 3 is seen to read directly in Fig. 5 of Miyamoto.

Regarding claims 4-5, the limitation "the triggering flank of the first output signal is a positive (or negative) flank, and the triggering flank of the second output signal is also a positive (or negative) flank are seen to define intended use. The high-speed differential amplifier of Miyamoto is capable of having the triggering flank of the first and second output signals are positive flank (or negative flank) as recited. *In re Tuominen*, 213 USPQ 89 (CCPA 1982) & *In re Pearson*, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974).

The limitation recited in claims 7-8 is seen to read on Fig. 5 of Miyamoto.

Regarding claim 9: the outputs of the transmission gates (21-24) are connected to each other (cross coupled connection via 26 and 23).

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Regarding claim 10: the first voltage level (V_{in}) is lower than the second voltage level (V_{cc}).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto as applied to claims 1-10 above.

As stated above, every element of the claimed invention recited in above claims can be seen in the circuit of Miyamoto. However, this reference does not specifically show the "the first voltage level varies from 1.2V to 1.9V, but more particularly from 1.4V to 1.6V, and the second voltage level from 1.5V to 2.2V, but more particularly from 1.7V to 1.9V" as recited in claim 11.

Although Miyamoto does not expressly state the first and second voltage levels, this difference is not of patentable merit because it is notoriously well known in the art that different values for the voltage levels can be selected in order to produce correspondingly different output values. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the first voltage level varies from 1.2V to 1.9V, but more particularly from 1.4V to 1.6V, and the second voltage level from 1.5V to 2.2V, but more particularly from 1.7V to 1.9V in realizing the

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circuit of the Miyamoto reference for the purpose of producing different output values when different values of the voltage levels are selected.

Regarding claim 12: the amplifier device (25, 26, 29, 30, 43, 44) has several cross-connected transistors.

Regarding claim 13: the transistors are field effect transistors (25, 26, 29, 30, 43, 44).

Allowable Subject Matter

Claim 14 is allowable over the prior art of record. None of the prior art disclosed or suggested to show the particular structure and/or the particular operation recited in these claims namely: "the first transmission gate output being connected to the second transmission gate output to form the second signal".

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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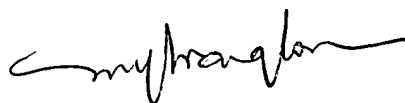
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 30, 2004



MY-TRANG NUTON
PRIMARY EXAMINER